

REMARKS

In the Final Office Action mailed April 27, 2007, claims 2-5 and 16-23 were "objected to"; claims 1, 6 and 8-9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. (U.S. Patent Publication No. 2003/0109243) in view of Saito (U.S. Patent No. 4,761,824); claims 10-12 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al. in view of Abe (U.S. Patent No. 5,834,857); and claim 7 was rejected under 35 U.S.C. 103(a) as being unpatentable over Chang in view of Saito and further in view of Official Notice; and claim 13 was rejected under 35 U.S.C. 103(a) as being unpatentable over Chang and Abe and further in view of Saito (U.S. Patent No. 4,761,824). The foregoing rejections and objections along with the Official Notices and assertions of obviousness made by the Examiner are respectfully traversed.

Minor amendments have been made to independent claim 10 to further clarify the present invention. Support for the claim amendments can be found at FIG. 3, for example.

Claims 2 and 16 have been amended into independent form to be in condition for allowance. Therefore, dependent claims 3, 4 and 17-23 which depend from claims 2 and 16 should now be in condition for allowance.

Claims 1-13 and 15-23 are currently pending and under consideration. Reconsideration is respectfully requested.

Regarding the 103(a) rejections of Independent claims 1, 8 and 10:

Claim 1 recites "a control unit comprises application programs and an operating system, and runs the application programs or controls the at least one function module, and communicates data lines and control signal lines with the at least one function module, and ***converts potential levels of the data lines and control signal lines connected with the at least one function module to a predetermined potential level in response to the power cutoff signal*** and then generates a backup power supply enable signal to enable the backup power supply unit to supply power".

Claims 8 and 10 recite features somewhat similar to those recited in amended claim 1.

As previously mentioned, Chang discusses a portable electronic device with power failure recovery. The portable electronic device is powered by a main power source, which comprises a power detection module, a processor, a timing unit and a power management unit. The power detection module detects an output characteristic from the main power source so as

to assert an interrupt signal if the detected output characteristic is below a first threshold value. In response, the processor asserts a turn-off signal and an enable signal. In response to the enable signal, the timing unit asserts a notification signal at a predetermined time interval when the enable signal is asserted in which the timing unit is directly powered by a backup power source. Chang also discloses a power failure recovery which includes a power detection module and a volatile RAM, a processor, a timing unit and a power management unit (see paragraph [0009] and FIG. 2, for example).

At page 3 of the Office Action, the Examiner admits that Chang fails to discuss "converts potential levels of the data lines and control signal lines connected with the at least one function module to a predetermined potential level in response to the power cutoff signal" as recited in claim 1, for example. However, again the Examiner asserts that this feature is well known in the art as taught by Saito. Specifically, at page 11, the Examiner asserts that Saito "broadly meets" the claimed feature of claim 1, mentioned above. The Applicants respectfully disagree with the Examiner.

Again as previously mentioned, Saito discusses a mobile communication apparatus which includes a transmitter, a receiver and a control circuit. The control circuit which monitors the DC output of the battery, has a reset function to turn off the transmitter when the DC output falls below a prescribed level. The control circuit merely detects *an instantaneous drop* (emphasis added) in the DC output level and further distinguishes the instantaneous voltage drop caused by the deterioration of the battery from any other instantaneous voltage drop (see column 2, lines 32-53). When the voltage falls below a prescribed level a reset voltage detector circuit changes its output from a high to a low level and the output of the controller circuit changes to its low level to turn off the transmitter. The battery voltage is quickly restored by the turning-off of the transmitter as shown in FIG. 3B. When the voltage is increased to or above the prescribed level, the output is changed from a low to a high level (see column 3, lines 43-47). In Saito, the battery voltage merely has to deteriorate below a prescribed level, which means the power is not completely "cut off". Instead, Saito is trying to differentiate between battery deterioration and interference. Therefore, Saito prevents the cut-off of the power by determining that the voltage level has dropped in order to turn off the transmitter to thereby bring the voltage level back up and then turn the transmitter back on. However, in Saito, if it is determined that the drop in voltage is extended due to a deterioration of the battery, the transmitter will not be turned back on even if the battery voltage rises above the threshold. The Examiner appears to be comparing the transmitter and transmitter reset function of Saito with the Applicants "at least one function module" as recited in claim 1, for example. However, based upon the comments mentioned above, the Applicants respectfully submit that this feature is not comparable to the Applicants' "at least one function module" as recited in claims 1, 8 and 10. The teachings of

Saito are fundamentally different from those of Chang, as well as those of the present invention. Therefore, it would not be obvious to combine Saito with Chang in order to read on the claimed invention. Thus, the Applicants respectfully submit that there is no motivation to combine Saito with Chang.

Claims 8 and 10 recite features somewhat similar to those recited in amended claim 1.

The Applicants respectfully submit that Saito fails to make up for the deficiencies of Chang mentioned above. Therefore, the combination of Chang and Saito fails to establish a *prima facie* case of obviousness over the present invention.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or discuss all the claim limitations**. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See M.P.E.P. § 2142.

Although the above comments are specifically directed to claims 1, 8 and 10, it is respectfully submitted that the comments would be helpful in understanding differences of various other rejected claims over the cited references.

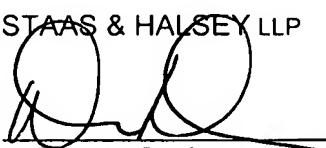
Withdrawal of the objections and rejections is respectfully requested.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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